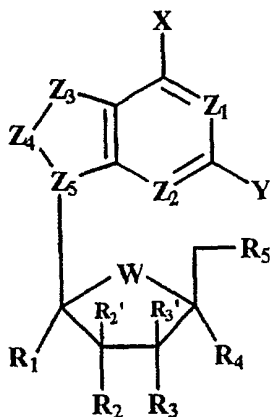


We claim:

1. A compound having a structure according to Formula I:



Formula I

wherein at least one of R_1 , R_2 , R_3 , R_4 , R_5 , R_2' and R_3' is OR''' , where R''' is $-C(O)R^a$ or a racemic, L, or D amino acid group $-C(O)CHNH_2R^a$, and R^a is a substituted or unsubstituted alkyl; where remaining R_1 , R_2 , R_3 , R_4 , R_5 , R_2' and R_3' are independently selected from H, OH, NH_2 , F, Cl, Br, I, N_3 , $-CN$, OR' , $-NR'_2$, $-SR'$, $-NHNH_2$, $-NHOH$, CHO, $COOR'$, $CONR'_2$, alkyl, alkenyl, alkynyl, aryl, aralkyl, substituted alkyl, substituted alkenyl, substituted alkynyl, substituted aryl, substituted aralkyl, where the substituent is selected from F, Cl, Br, I, N_3 , $-CN$, $-OR''$, NO_2 , $-NR''_2$, SR'' , $-NHNH_2$, $-NHOH$, $COOR'$, $CONR''_2$, and where R' and R'' are H, alkyl, alkenyl, alkynyl, aryl, aralkyl;

$W = O, S, CH_2, Se$;

Z_1, Z_2 , are independently selected from N, C, CH;

Z_3, Z_4, Z_5 are independently selected from the group consisting of $-CR-$, $NR-$, $-O-$, $-S-$, $-Se-$, $-C=O$, $-C=S$, $-S=O$, $-CR=CR-$, $-CR=N-$, $-N=N-$, where R is selected from the group consisting of H, F, Cl, Br, I, N_3 , $-CN$, $-OR'$, $-NR'_2$, $-SR'$, $-NHNH_2$, $-NHOH$, $-NO_2$, CHO, $COOR'$, $CONH_2$, $-C(O)-NH_2$, $-C(S)-NH_2$, $-C(NH)-NH_2$, $-C(NOH)-NH_2$, $=O$, $=NH$, $=NHOH$, $=NR$, alkyl, alkenyl, alkynyl, aryl, aralkyl, substituted alkyl, substituted alkenyl, substituted alkynyl, substituted aryl, substituted aralkyl, where the substituent is selected from H, $-OH$, NH_2 , F, Cl, Br, I, N_3 , $-CN$, $-COOR''$, $-CONR''_2$, -

OR", -NR"₂, -SR", -NHNH₂, -NHOH, -NO₂, and R', R" are H, alkyl, alkenyl, alkynyl, aryl, aralkyl, acetyl, acyl, sulfonyl;

The Chemical bond between Z₃ and Z₄ or Z₄ and Z₅ is selected from C-C, C=C, C-N, C=N, N-N, N=N, C-S, N-S;

- 5 X and Y are independently selected from the group consisting of H, OH, NH₂, F, Cl, Br, I, N₃, -S-NH₂, -S(O)-NH₂, -S(O)NH₂, -CN, -COOR', -CONR'₂, -OR', -NR'₂, -SR', -NHNH₂, -NHOH, alkyl, alkenyl, alkynyl, aryl, aralkyl, substituted alkyl, substituted alkenyl, substituted alkynyl, substituted aryl, substituted aralkyl, where the substituent is selected from F, Cl, Br, I, N₃, -CN, -OR", NO₂, -NR"₂, SR", -NHNH₂, -NHOH, and
- 10 R', R", are H, alkyl, alkenyl, alkynyl, aryl, aralkyl.